[illegible]

SHIRYAYEVA, L.V.; TOLMACHEV, G.M.

The chemical behavior of Mo^{99} formed on neutron irradiation of uranium compounds. Atom.energ. 3 no.10:318-320 O '57. (MIRA 10:10)
(Molybdenum--Isotopes) (Uranium compounds) (Neutrons)

SOV/89-5-2-5/36

AUTHORS: Protopopov, A. N., ~~Tolmachev, G. M.,~~ Ushatskiy, V. N., Venediktova, R. V., Krisyuk, I. T., Rodionova, L. P., Yakovleva, G. V.

TITLE: Distribution of the Mass of Fission Fragments Resulting From the Fission of U^{235}, U^{238} and Pu^{239} Induced by 14,6 MeV Neutrons (Raspredeleniye oskolkov po massam pri delenii U^{235}, U^{238}, Pu^{239} neytronami s energiiyey 14,6 Mev)

PERIODICAL: Atomnaya energiya, 1958, Vol. 5, Nr 2, pp. 130-134 (USSR)

ABSTRACT: The reaction $H^3(d,n)He^4$ served as a neutron source, the deuterons being accelerated up to 170 kV. Irradiation of the nuclei to be fissioned took place by means of a medium neutron flux of $5 \cdot 10^8$ n/cm^2.sec. Irradiation lasted from some minutes up to 8 hours. Separation of the fission products was carried out by the method of isotopic dilution. The separated elements were brought into anhydrous or non-hygroscopic compounds the absolute β-activity of which was measured with respect to the saturation activity of Mo^{99}. The following relative yields were measured:

Card 1/3

Distribution of the Mass of Fission Fragments
Resulting From the Fission of U^{235}, U^{238} and Pu^{239}
Induced by 14,6 MeV Neutrons

SOV/89-5-2-5/36

	U^{235}	U^{238}	Pu^{239}
Sr^{89}	0,86±0,04	0,55±0,03	0,44±0,02
Sr^{91}	0,96±0,07	0,65±0,05	0,49±0,03
Zr^{95}	0,97±0,04	0,93±0,04	-
Zr^{97}	1,16±0,05	1,02±0,05	0,96±0,04
Mo^{90}	1	1	1
Mo^{101}	-	0,99±0,04	-
Mo^{102}	-	0,71±0,08	-
Ru^{105}	0,28±0,02	0,39±0,03	-
Ag^{111}	0,22±0,01	0,18±0,01	0,34±0,02
Ag^{113}	0,22±0,02	0,16±0,01	-

Distribution of the Mass of Fission Fragments Resulting From the Fission of U^{235}, U^{238} and Pu^{239} Induced by 14,6 MeV Neutrons

SOV/89-5-2-5/36

	U^{235}	U^{238}	Pu^{239}
Cd^{115}	$0,21\pm0,01$	$0,16\pm0,01$	$0,28\pm0,02$
I^{131}	$0,83\pm0,05$	$0,91\pm0,05$	-
Ba^{140}	$0,86\pm0,04$	$0,80\pm0,04$	$0,64\pm0,03$

The half-life of Mo^{99} was measured separately: $T_{1/2} = 67,2\pm0,2$ h. There are 3 figures, 1 table, and 16 references, 3 of which are Soviet.

SUBMITTED: September 12, 1958

Card 3/3

PETRZHAK, K.A.; TOLMACHEV, G.M.; USHATSKIY, V.N.; BAK, M.A.;
BLINOVA, N.I.; BUGORKOV, S.S.; MOSKAL'KOVA, E.A.; OSIPOVA,
V.V.; PETROV, Yu.G.; SOROKINA, A.V.; CHERNYSHEVA, L.P.;
SHIRYAYEVA, L.V.

[Yields of certain fragments in U^{235}, U^{238}, and Pu^{239} fission by neutrons] Vykhody nekotorykh oskolkov pri delenii U^{235}, U^{238} i Pu^{239} neitronami deleniia. Moskva, Glav. upr. po ispol'zovaniiu atomnoi energii, 1960. 14 p. (MIRA 17:2)

32986

S/641/61/000/000/013/033
B104/B102

24.6600

AUTHORS: Petrzhak, K. A., Tolmachev, G. M., Ushatskiy, V. N., Bak. M. A., Blinova, N. I., Bugorkov, S. S., Moskal'kova, E. A., Osipova, V. B., Petrov, Yu. G., Sorokina, A. V., Chernysheva, L. P., Shiryayeva, L. B.

TITLE: Yields of some fragments in the fission of U^{235}, U^{238}, and Pu^{239} by fission neutrons

SOURCE: Krupchitskiy, P. A., ed. Neytronnaya fizika; sbornik statey. Moscow, 1961, 217-223

TEXT: The authors determined the yield of Sr^{89}, Zr^{95}, Mo^{99}, Ag^{111}, Cd^{115}, and Ba^{140} in the fission of U^{235}, U^{238}, and Pu^{239} by fission neutrons. A U^{235}-enriched uranium plate arranged in the thermal column of a heavy-water reactor of the AS USSR served as neutron source. 300-mg tablets and 1-μg targets were produced from each substance to be fissioned. The fission events were recorded in a fission chamber during the entire irradiation period (Fig. 1). The fission fragment yields were determined from their

Card 1/[illegible]

32986

Yields of some fragments in ...

S/641/61/000/000/013/033
B104/B102

β-activity. The absolute β-activity was measured by two standard instruments with end-window counters. These standard instruments were calibrated with preparations of the fission fragments to be studied which had been applied to a collodium film. The absolute β-activity of the standard preparations was determined either with a 4π-counter or with an end-window counter having a window thickness of 0.005 ± 0.001 mg/cm^2. Six to eight measurements were made in three to four tablets (Fig. 3). The determination error of the fragment yield was between 6 and 11%. The fragment yield is found to depend on the isotope mass number. There are 3 figures, 3 tables, and 7 references: 3 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: Engelkemeir, D., Novey T., Schover D. Radiochemical Studies. The Fission Products, Book 3, div. IV, vol. 9, 1334 (1951); Radiochemical Studies: The Fission Products. Book 3, div. IV, vol. 9, Appendix B, 2003 (1951); Keller R., Steinberg E., Glendenin L., Phys. Rev., 94, 4, 969 (1954); Turkevich A., Niday J., Phys. Rev., 84, 1, 52, (1951).

Card 2/2

MANOYLOV, V. Ye., kand. tekhn. nauk, dotsent; TOLMACHEV, G. P., inzh.

Action of the β-radiation of a S^{35} sulfur isotope on the characteristics of RG-type storage batteries. Izv. LETI 59 no.46:319-327 '62. (MIRA 15:10)

(Storage batteries)

S/196/62/000/019/001/004
E194/E455

AUTHORS: Manoylov, V.Ye., Tolmachev, G.P.

TITLE: The effect of the β-radiation radioactive isotope of isotope of sulphur S^{35} on the characteristics of lead-acid accumulators type PГ (RG)

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.19, 1962, 14, abstract 19A83. (Izv. Leningr. elektrotekhn. in-ta, no.46, 1961, 319-327)

✓

TEXT: The increase in capacity of alkaline accumulators type HKH-10 (NKN-10) that is observed on introducing into the electrolyte 15 to 20 millicuries Ca^{45} has been attributed to the radiation. As the ionizing particles pass through the water the number of radiolysed water molecules reaches 10 - 12 for every 100 eV of absorbed energy of radiation. The introduction into the electrolyte of S^{35} with a maximum radiation energy E_{β} = 67 MeV was expected to produce 16 - 17 radiolysed molecules of water per second per dissociation. Experiments have shown that on introducing 60 to 80 milliCuries of S^{35} into the electrolyte type RG the capacity increased by 3 - 4% for a short time.

Card 1/2

The effect of the β-radiation ... S/196/62/000/019/001/004
E194/E455

Meanwhile, the other characteristics of the accumulator were impaired. 5 illustrations. 4 literature references.

[Abstracter's note: Complete translation.]

√

Card 2/2

TOLMACHEV, I., polkovnik

Studying and publicizing new regulations. Voen. vest. 40 no. 1:39-42 Ja '61. (MIRA 13:12)
(Russia--Armed forces--Regulations)

TOLMACHEV, I.A., nauchnyy sotrudnik

Breeding and propagating actinidias. Trudy TSGL 6:303-308 '57.
(MIRA 12:10)

(Actinidia)

TOLMACHEV, I.A.

Ways of developing fruit-bearing Ribes and Glossularia hybrids. Trudy TSGL 5:157-181 '53. (MIRA 12:11)
(Currant breeding) (Gooseberry breeding)
(Hybridization, Vegetable)

TOLMACHEV, I.A.

Developing thornless forms of gooseberries. Biul.nauch.-tekh. inform.TSGL no.1:21-22 '56. (MIRA 12:1)
(Gooseberry breeding)

LOBANOV, P.; BREZHNEV, D.; OL'SHANSKIY, M.; LYSENKO, T.; LISAVENKO, M.; SINYAGIN, I.; YAKUSHKIN, I.; PREZENT, I.; VARUNTSYAN, I.; KOLESNIKOV, V.; YEVTUSHENKO, A.; ZASYADNIKOV, T.; ALISOV, M.; UTEKHIN, A.; GORSHKOV, I.; BELOKHONOV, I.; VIDENIN, K.; KARPOV, G.; CHERNENKO, S.; BAKHAREV, A.; TIKHONOVA, A.; KUZ'MIN, A.; BUZULIN, G.; TOLMACHEV, I.; LYSYUK, Ye.; KHARITONOVA, Ye.; KUSHNIRENKO, M.; NOVOPAVLOVSKAYA, N.; ZHIRONKIN, I.; KATSURA, O.; KIRYUKHIN, I.; NIKITIN, B.; TSVETAYEVA, Z.; ARKHIPOV, B.; OSTAPENKO, V.; IVANOV, V.; BUTUZOV, V.; LUTKOVA, I.; TSVETAYEVA, Z.; ARKHIPOV, B.; OSTAPENKO, V.; IVANOV, V.; BUTUZOV, V.; LUTKOVA, I.

P.N. IAkovlev; obituary. Agrobiologiia no.6:119 N-D '57. (MIRA 10:12)

(IAkovlev, Pavel Nikanorovich, 1898-1957)

TOLMACHEV, I.I.

Effect of temperature on the assimilation of wall rock xenoliths by granitic magma. Izv.AN Kazakh.SSR. Ser. geol. no.24:77-78 '56. (MLRA 10:2)

(Rocks, Igneous)

TOLMACHEV, I.I.

Some data on the morphology of Ordovician phosphorite deposits in Kazakhstan. Izv. AN Kazakh. SSR. Ser.geol. no.3:70-73 '62. (MIRA 15:7)

(Kazakhstan—Phosphorite)

TOLMACHEV, I.I.

Minerology and goechemistry of Ordovician phosphorites in Kazakhstan. Izv. AN Kazakh. SSR. Ser. geol. no.2:122-125 '61. (MIRA 14:7)

(Kazkhstan—Phosphorites)

TOLMACHEV, I.I.

15-1957-7-9272

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7, p 70 (USSR)

AUTHOR: Tolmachev, I. I.

TITLE: The Influence of Temperature on the Assimilation of Xenoliths of Country Rock by Granite Magma (Vliyaniye temperatury na assimilyatsyu ksenolitov vmeshchayushchikh porod granitnoy magmoy)

PERIODICAL: Izv. AN KazSSR, Ser. geol., 1956, Nr 24, pp 77-78

ABSTRACT: During the study of granite masses intruded into pre-Paleozoic biotite and biotite-muscovite gneisses, acute-angled fragments of the gneisses, approximately 30 by 15 cm, were found in the granite. At depth the fragments are ellipsoidal or spherical. The different heights of the xenoliths in the mass, which vary by as much as 30-50 m, result from the great variation in intensity of assimilation. Locally, where the xenoliths have been recrystallized , feldspar has the form of a parallelepiped and attains a size of several centi-

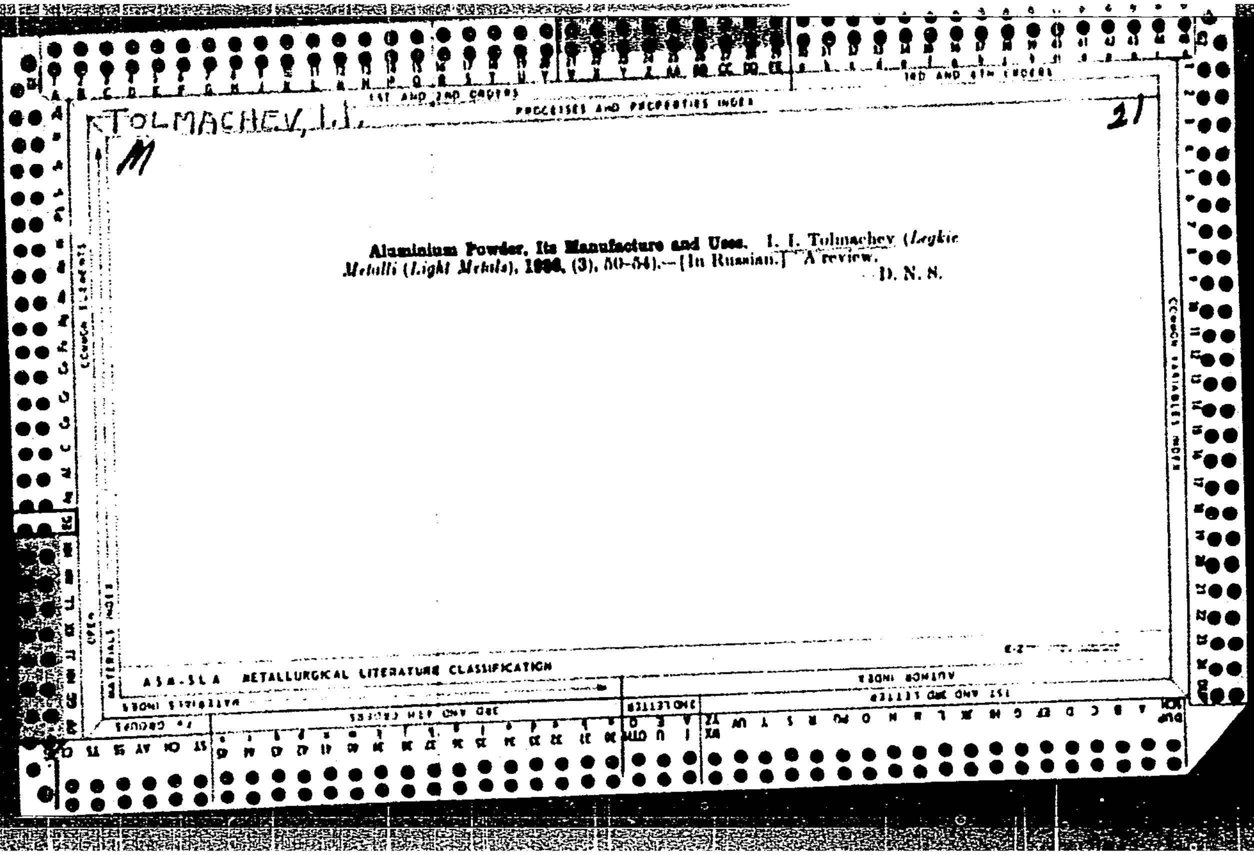
Card 1/2

The Influence of Temperature on the Assimilation of Xenoliths of Country Rock by Granite Magma (Cont.) 15-1957-7-9272

meters, and quartz grains are enlarged. Apparently marked changes in the composition of the granite magma could not take place because the intrusive rock and the country rock have similar compositions.

Card 2/2

S. P. Bryzgalina


1ST AND 2ND GROUPS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
MATERIALS INDEX
AUTHOR INDEX
1ST AND 2ND LETTER
3RD AND 4TH GROUPS

TOLMACHEV, I.I.

M

21

Aluminium Powder, Its Manufacture and Uses. I. I. Tolmachev (*Legkie Metalli* (*Light Metals*), **1936**, (3), 50-54).—[In Russian.] A review.

D. N. S.

TOLMACHEV, Ivan Ivanovich, polkovnik; MOROZOV, B.N., polkovnik, red.; CHAPAYEVA, R.I., tekhn. red.

[Regulations on the morale and combat qualities of Soviet soldiers] Ustavy o moral'no-boevykh kachestvakh sovetskikh voinov. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 96 p. (MIRA 15:3)

(Morale)

S/089/62/013/006/018/027
B102/B186

AUTHORS: Syromyatnikov, N. G., Tolmachev, I. I.

TITLE: Investigation of the U^{234}/U^{238} isotopic ratio in aqueous extracts from uranium - phosphate - zirconium ores in relation to their genesis

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 600 - 602

TITLE: The well-known shift of the U^{234}/U^{238} ratio that attends the transition of uranium from ores or minerals into solution was studied, endeavoring to find the laws governing this shift. For this purpose a great many rock, ore, water, and aqueous extract samples were analyzed and the isotope ratio determined. The result seems to be as follows: for phosphate ores (full circles) the ratio shows a spread only of about the value 2, for phosphate - zirconium ores (empty circles) the ratio tends to increase somewhat with increasing uranium concentration; but the values are widely spread between 2.5 and 5.7 and no law can be deduced. If, however, the isotope ratio is plotted against the ZrO_2 content of uranium phosphate ores, it is seen that the ratio shows a distinct tendency to rise

Card 1/2

Investigation of the...

S/089/62/013/006/018/027
B102/B186

with the ZrO_2 concentration. The results are explained as being due to uranium syngenesis with phosphates superposed by hydrothermal processes. Since the latter run parallel for uranium and zirconium the dependence on the ZrO_2 content can be explained. There are 2 figures and 1 table.

SUBMITTED: April 27, 1961

Card 2/2

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

TOLMACHEV, I.M.

CA

78

Moving sugar-beet culture to the northern sections of the U. S. S. R. I. M. Tolmachev and B. I. Il'inskii. *Nauch. Zapiski Sakharnoi Prom.* 11, Book 40, No. 2, 18-33 (1934).—The sugar content of beets grown in the north is as high as 16%, but they produce 4.65 to 5.05% of feed molasses. J. S. Joffe

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

TOLMACHEV, I.M.

Research problems in the field of the plant respiration and assimilation complex and productivity. Trudy Inst.fiziol.rast. 10:192-196 '55. (MIRA 8:9)

1. Belotserkovskiy sel'skokhozyaystvennyy institut.
(Plants--Respiration) (Plants--Assimilation)

TOLMACHEV, I.N.

3

PHASE I BOOK EXPLOITATION SOV/5973

Rayev-Bogoslovskiy, Boris Sergeyevich, Georgiy Ivanovich Glushkov, Andrey Stepanovich Tkachenko, Aleksandr Vasil'yevich Mikhaylov, Leon Ivanovich Manvelov, Nikolay Ivanovich Volokhov, Ivan Nikolayevich Tolmachev, and Fedor Iosifovich Ruben

Zhestkiye pokrytiya aerodromov (Hard Surface Covers of Airfields) Moscow, Avtotransizdat, 1961. 321 p. 2000 copies printed.

Ed.: B. S. Doberdeyev; Tech. Ed.: Ye. N. Galaktionova.

PURPOSE: This book is intended for technical personnel and may prove useful to students at technical schools.

COVERAGE: The book discusses the properties, characteristic features, and construction of runways, taxiways, stands for airplanes, and platforms for passengers to be used in the various climatic and geological regions of the USSR. The following are reviewed: specifications of materials, modern airfield-surface covers (one- and two-layer concrete, ferroconcrete, prestressed, monolithic, and

Card 1/6

TOLMACHEV, I.N.; SHCHETININA, Ye., red.; POLONSKIY, S., tekhn. red.

[Construction on collective farms in the Dniester Valley]
Stroitel'stvo v kolkhozakh Pridnestrov'ia. Kishinev, Gos.
izd-vo "Kartia moldoveniaske," 1960. 56 p. (MIRA 15:4)
(Dniester Valley--Farm buildings)

RAYEV-BOGOSLOVSKIY, Boris Sergeyevich, kand. tekhn. nauk; GLUSHKOV, Georgiy Ivanovich, doktor tekhn. nauk; TKACHENKO, Andrey Stepanovich, kand. tekhn. nauk. **MANVELOV, Leon Ivanovich**, kand. tekhn. nauk; MIKHAYLOV, Aleksandr Vasil'yevich, kand. tekhn. nauk; VOLOKHOV, Nikolay Ivanovich, kand. tekhn. nauk; TOLMACHEV, Ivan Nikolayevich, kand. tekhn. nauk; RUBAN, Fedor Iosifovich, kand. tekhn. nauk; MAKEYEV, K.S., nauchnyy red.; DEBERDEYEV, B.S., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Durable pavement for airports] Zhestkie pokrytiia aerodromov. [By] B.S.Raev-Bogoslovskii i dr. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR, 1961. 321 p. (MIRA 15:3)
(Airports--Runways) (Concrete construction)

TOLMACHEV, I. P.

Notes from the Khatanga Expedition. Izv. Russk, Geogr, obshch. Vol 42 No. 2-3, 1906

So: Trudy Arkticheskogo Nauchno-Issledovatel'skogo Instituta, GUSMP, Council of Ministers, Vol. 201, 1948

VISHNYAKOV, P.M.; TOLMACHEV, I.P., red.

[Production of butter in Vologda Province by the continuous process] Proizvodstvo vologodskogo masla na potochnoi linii; iz opyta raboty Krasnosukhonskogo maslozavoda Vologodskogo sovnarkhoza. Vologda, Vologodskoe knizhnoe izd-vo, 1959. 14 p. (MIRA 13:12)

(Vologda Province--Butter)

TOLMACHEV, I. P.

New discoveries in geology of Siberia. Trudy S-Peterburgsk obshch. Yestestvoisp
Vol. 34 No. 1, 1903

So: Trudy Arkticheskogo Nauchno-Issledovatel'skogo Instituta, GUSMP, Council of Ministers, Vol. 201, 1948

TOLMACHEV, Innokentii Pavlovich

TOLMACHEV, Innokentii Pavolvich. Siberian passage; an explorer's search into the Russian Arctic. New Brunswick, Rutgers University Press, 1949. ix, 238, p.
DLC: DK755.T6

SO: LC, Soviet Geography, Part II, 1951/Unclassified

TOLMACHEV, Innokentii Pavlovich

TOLMACHEV, Innokentii Pavlovich. Siberian passage; an explorer's search into the Russian Arctic. New Brunswick, Rutgers University Press, 1949. ix, 238 p.

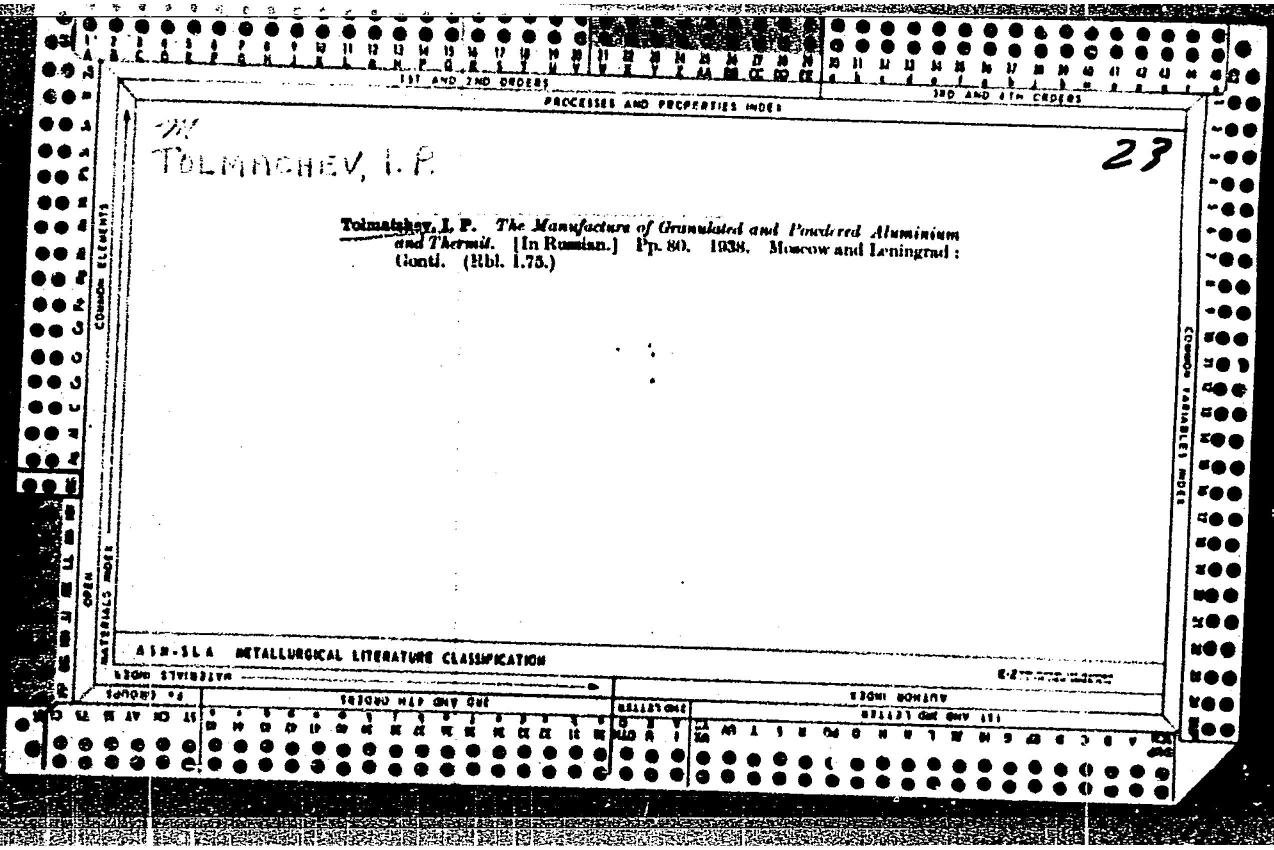
DLC: DK755.T6

So: LC, Soviet Geography, Part II, 1951/Unclassified

TOLMACHEV, INNOCKENTII PAVLOVICH

TOLMACHEV, INNOCKENTII PAVLOVICH. Siberian passage; an explorer's search into the Russian Arctic. New Brunswick, Rutgers University Press, 1949. ix, 238 p. DLC: DK755.T6

SO: LC, Soviet Geography, Part 1, 1951, Uncl.


1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
COMMON ELEMENTS
MATERIALS INDEX
OPEN
COMMON VARIABLES INDEX
AUTHOR INDEX

TOLMACHEV, I. P.

23

Tolmatshev, I. P. *The Manufacture of Granulated and Powdered Aluminium and Thermit.* [In Russian.] Pp. 80. 1938. Moscow and Leningrad: Gonti. (Rbl. 1.75.)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GIBSHMAN, Ye.Ye., prof., doktor tekhn.nauk; TOLMACHEV. T.Kh., otvetstvennyy red.; GALAKTIONOVA, Ye.N., tekhn.red.

[Rebuilding bridges on automobile roads] Vosstanovlenie mostov na avtomobil'nykh dorogakh. Moskva, Dorizdat, 1947. 230 p.
(Bridge construction) (MIRA 11:5)

TOLMACHEV, Konstantin Khrisanfovich, dotsent, kand.tekhn.nauk; CHARUYSKIY, A.P., red.; GALAKTIONOVA, Ye.N., tekhn.red.; DONSKAYA, G.D., tekhn.red.

[Controlling stresses in metal bridge span structures] Regulirovanie napriazhenii v metallicheskikh proletnykh stroeniiakh mostov. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1960. 114 p. (MIRA 13:6)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Tolmachev).
(Bridges, Iron and steel) (Strains and stresses)

TOLMACHEV, K.Kh.

A good textbook on reinforced concrete bridges ("Reinforced concrete bridges" by N.I. Polivanov. Reviewed by K. Kh. Tolmachev). Avt.dor. 20 no.7:29-30 Jl '57. (MIRA 10:10)

1.Zaveduyushchiy kafedroy mostov Sibirskogo avtomobil'no-dorozhnogo instituta im. Kuybysheva.
(Bridges, Concrete)

TOLMACHEV, K. KH.

4416. TOLMACHEV, K. KH. -- Na stroikakh omska. omsk, ob. kn. izd., 1954. 71s. s ill. 20 sm. (tribuna peredovogo opyta). 3.000 ekz. 1r. 10k.--(54-58390)p 693st(57.14)

SO: Knizhnaya Letopsis', Vol. 1, 1955

TOLMACHEV, IU. M.

RT-1014 (Background in measurements of relative intensities of spectral lines)
Ob uchete fona pri izmereniiakh otnositel'nykh intensivnostei spektral'nykh linii.
Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, 13(3-4): 93-100, 1943

30886. TOLMACHEV, K. Kh.

Znamenityy russkiy stoitel' mostov D. I. Zhuravskiy. (XIX v) Trudy Nauch. konf-tsii, posvyashch. roli rus i sov uchenykh u mirovoy nauke i tekhnike 6-8 maya 1948 g. Vyp. 1. Omsk, 1949, s. 59-75. -- Bibliogr: 12 nazv.

TOLMACHEV, Konstantin Khrisanfovich, prof.; GIBSHMAN, M.Ye., dots., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Special structures for mountain roads] Spetsial'nye sooruzheniia na gornykh dorogakh. Moskva, Avtotransizdat, 1963. 284 p. (MIRA 16:8)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Tolmachev).

(Mountain roads)

Tolmachev, M.A

1333. IMPROVEMENT OF BOILER PLANTS BY AIR-PREHEATING. Tolmachev, M.A. and Yurush, N.M. (Elekt. Sta. (Pwr Sta., Moscow), Jan. 1956, vol. 27, 5-7). Air-preheating by means of the hot water from a low-pressure economizer can be carried out in any boiler installation, even where there is no air-preheater. In this case, the preheating can be increased by enlarging the heating surface of the economizer. Details are given of the utilization of two such heaters at one power plant which resulted in reducing the waste-gas temperature from 140° to 110°C and raising boiler efficiency by 1.9%.
C.E.A.

2

TOLMACHEV, M., inzh.

A "live" fence. Gor. i sel'.stroi. no.5:12 My '57. (MIRA 10:10)
(Fences)

TOIMACHEV, Mark Alekseyevich; YARTSEV, N., red.; KUZNETSOVA, A., tekhn. red.

[Masters of innovations] Mastera novinok. Moskva, Mosk. rabochii, 1961. 30 p. (MIRA 15:3)
(Reinforced concrete construction)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

TOLMACHEV, N.A.

CP

P

The action of ethyl chloride on *o***-toluidine.** N. A. Tolmachev. *Trans. Leningrad Chem.-Tech. Inst.* 1, 110-24(1934).—Between 170° and 200°, the yields of $MeC_6H_4NHEt.HCl$ (I), $MeC_6H_4NEt_2.HCl$ (II) and unchanged toluidine (III) are independent of the temp. and the time of heating of the bomb and the excess of EtCl. With molar quantities the yields of I, II and III are 70-2, 15-16 and 12-15, moles %, resp. Addn. of pyridine correspondingly increases the consumption of EtCl but not of toluidine reacting. F. H. Rathmann

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

CA

Tolmachev N.A.

2

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

COMMON ELEMENTS

MATERIALS INDEX

Solubility of sodium naphthalene-1,6-disulfonate in aqueous sodium chloride at 15°. N. A. Tolmachev. *Anilinokrasochnaya Prom.* 5, 219-20(1935).—The soly. falls from 18% in H_2O to 1% in 25% NaCl. H. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TATISHCHEV, S.V., prof.; TOLMACHEV, N.A., inzh.

Mechanical shaft furnace with block peat firing. Energetik 6 no.5: 28-31 My '58. (MIRA 11:7)

(Furnaces)

Tolmachev, N.A.

91-58-5-27/35

AUTHORS: Tatishchev, S.V., Professor, and Tolmachev, N.A., Engineer

TITLE: A Mechanized Shaft Furnace Burning Lump Peat (Mekhanizirovannaya shakhtnaya topka na kuskovom torfe)

PERIODICAL: Energetik, 1958, Nr 5, pp 28-31 (USSR)

ABSTRACT: Shaft furnaces burning lump-peat are widely used in power installations. Experience has shown that the drying and burning of lump-peat takes place on the horizontal gratings where also most of the slags form. It is proposed to apply a horizontally stirring plank to mechanize the work of the furnace. The cross-section of the plank is shown in Figure 3. The plank is moved by a 3.5 kw electromotor. The installation has been tested under different qualities of peat. The most difficult operating conditions were observed with peat of a 38 - 45% moisture content because of the intensive slag formation. But even under these conditions an output of 16-ton/hr could be obtained. The experimental data of the mechanized furnace are given in Table 1. It is shown that the values of incomplete mechanical and chemical burning are lowered. Improved burning is caused if the air is preheated to 200° C or more.

Card 1/2

A Mechanized Shaft Furnace Burning Lump Peat

91-58-5-27/35

The mechanized shaft furnaces may be used with boilers of 3 - 12-ton/hr of steam output. There are 4 figures and 2 tables.

AVAILABLE: Library of Congress

Card 2/2 1. Furnaces - Fuel

Cand. Tech. Sci.

TOLMACHEV, N. A.

Dissertation: "Approximate solution of the Problem of the Laminar Boundary Layer."

24 Nov. 49

Sci. Res. Inst. of Mechanics of the Moscow Order of Lenin State U.

imeni M. V. Lomonosov

SO Vecheryaya Moskva
Sum 71

[illegible]

TOLMACHEV, N.A.

Integral correlations of boundary layers and their use for incompressible fluids. Uch.zap. Mosk. un. no.172:47-59 '54.
(Boundary layer) (MLRA 8:11)

TOLMACHEV, N.A.

AID P - 3701

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 6/25

Authors : Tolmachev, N. A., Eng. and Yurush, N. M., Workshop head

Title : Thermal water softening outside of the boiler drum

Periodical : Energetik, 12, 12-13, D 1955

Abstract : The authors present an arrangement for thermal water softening used to treat feed water outside of the boiler drum. They describe technical details of the arrangement and enumerate the advantages of the method. One schematic drawing.

Institution : None

Submitted : No date

TOLMACHEV, N.A., inzhener; YURUSH, N.M., inzhener.

Increasing the efficiency of boiler installations by air preheating.
Elek. sta. 27 no.1:5-7 Ja '56. (MLRA 9:6)
(Boilers--Air preheating)

TOLMACHEV, N.G.

Detecting patients with osteoarticular tuberculosis. Zdrav. Tadzh. 8 no.6:7-8 N-D '61. (MIRA 15:1)

1. Iz Respublikanskogo protivotuberkuleznogo dispensera Tadzhikskoy SSR (glavnyy vrach L.V.Shanskiy).
(BONES--TUBERCULOSIS) (JOINTS--TUBERCULOSIS)

TOLMACHEV, N.G.

Osteoarticular tuberculosis and pregnancy. Akush.i gin. no.6: 89-90 '61. (MIRA 14:12)

1. Iz Respublikanskogo protivotuberkuleznogo dispansera (glavnyy vrach L.V. Shanskiy) Tadzhikskoy SSR.
(BONES—TUBERCULOSIS) (PREGNANCY, COMPLICATIONS OF)
(JOINTS—TUBERCULOSIS)

TOLMACHEV, N.G.

Treatment of bone and joint tuberculosis by the general surgeon.
Zdrav. Tadzh. 7 no. 3:15-17 My-Je '60. (MIRA 14:4)

1. Iz respublikanskogo protivotuberkuleznogo dispansera, Stalinabad.
(BONES—TUBERCULOSIS)

TOLMACHEV, N.G.

Working capacity of patients with osteoarticular tuberculosis.
Sov.med. 24 no.3:147-149 Mr '60. (MIRA 14:3)

1. Iz respublikanskogo protivotuberkuleznogo dispansera Tadzhikskoy SSR (glavnyy vrach L.V.Shanskiy).
(BONES--TUBERCULOSIS) (DISABILITY EVALUATION)

TOLMACHEV, N.I.

Stability of slabs in precast concrete highway pavements.
Trudy Khar. avt.-dor. inst. no.28:60-64 '62. (MIRA 17:2)

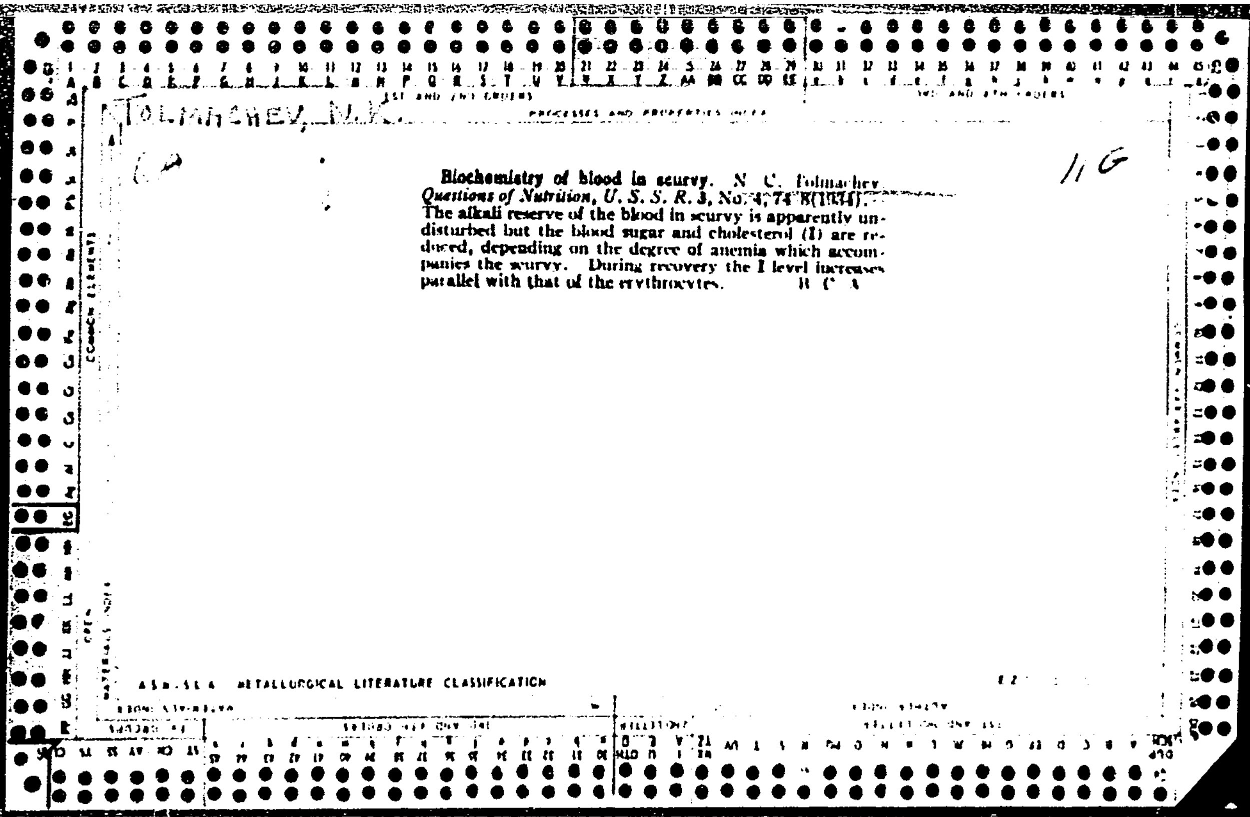
MIKHOVICH, S.I.; TARASENKO, L.P.; TOLMACHEV, N.I.

Precast concrete pavements of roads leading to industrial plants in the Donets Basin. Avt.dor. 24 no.2:8-9 F '61. (MIRA 14:3)
(Donets Basin--Pavements, Concrete)

TOLMACHEV, N.K. (Leningrad)

Taking into account the thrust as an external load in designing mooring structures. Osn. fund. i mekh. grun. 2 no.6:21 '60.
(MIRA 13:12)

(Docks)



TOLMACHEV, N.K.

CA

11G

Biochemistry of blood in scurvy. N. C. Tolmachev. *Questions of Nutrition, U. S. S. R.* 3, No. 4, 74-8(1934).—The alkali reserve of the blood in scurvy is apparently undisturbed but the blood sugar and cholesterol (I) are reduced, depending on the degree of anemia which accompanies the scurvy. During recovery the I level increases parallel with that of the erythrocytes. R. C. A.

1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

TOLMACHEV, N. K.

CA

11F

The effect of some endocrine preparations on the regeneration of the erythrocytes in rabbits. I. The effect of thyroxine, of thyrotropic hormone and of the urine of pregnant individuals on the regeneration of the erythrocytes of rabbits suffering from experimental anemia. N. K. Tolmachev. *Problemy Endokrinol.* 2, No. 1, 33-48 (1937); *Chem. Zentr.* 1938, I, 921.—Subcutaneous injection of urine from pregnant individuals produces an acceleration in the regeneration of erythrocytes and of hemoglobin; thyrotropic hormone produces only a slight effect; thyroxine and normal urine are without effect.

M. G. Moore

COMMON ELEMENTS

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TOLMACHEV, N.Kh.; CHERNEVICH, Ye.L.

Plasma cell myelomas. Lab.delo no.5:22-24 S-O '55.
(MIRA 12:6)

1. Iz kafedry patofiziologii (zav. - dots. N.Kh.Tolmachev) Novosibirskogo meditsinskogo instituta i kliniko-diagnosticheskoy laboratorii (zav. L.P.Bredikhina) Tsentral'noy polikliniki Novosibirska.
(MYELOMA, PLASMA CELL, case reports,)

TOLMACHEV, N.P.

Let us work better. Mashinostroitel' no.3:41 Mr '61.

(MIRA 14:3)

1. Rukovoditel' brigady kommunisticheskogo truda Moskovskogo avtomobil'nogo zavoda imeni I.A. Likhacheva.
(Moscow--Automobile industry)

TOLMACHEV, P.

2

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Solubility and activity of the halates of some bivalent metals. III. Solubility and activity of $Ra(IO_3)_2$ in water and in solutions of electrolytes. A. Polesitskii and P. Tolmachev. *Compt. rend. acad. sci. U. R. S. S.* [N. S.] ~~1, 2,~~ 319-20(1936); cf. *C. A.* 30, 3700^7.—The soly. of $Ra(IO_3)_2$ in H_2O from 0° to 100° ranged from 0.000305 mol./l. to 0.00290. Its soly. in concd. solns. of KNO_3, $Ca(NO_3)_2$ and KIO_3 at 25° was detd. for different concns. of electrolyte. The limiting soly. of $Ra(IO_3)_2$ and the activity coeff. at different ionic strengths were calcd.

M. McMahon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TOLMACHEV, P. A.

Dissertation: "Therapeutic Protein Nutrition in Burns." Cand Med Sci, First Moscow Order of Lenin Medical Inst, 10 May 54. Vechernyaya Moskva, Moscow, 2 May 54.

SO: SUM 284, 26 Nov 1954

TOLMACHEV, P.I. [deceased].

Bibliography of works published by the Radium Institute of the U.S.S.R. Academy of Sciences, 1938-1939. Trudy Radiev. inst. AN SSSR 5 no.2:287-291 '57. (MLRA 10:8)
(Bibliography--Radioactivity)

AUTHOR: Tolmachev, P.V. SOV/110-59-1-22/28

TITLE: Letter to the Editor (Pis'ma chitateley)

PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 1, pp 70-71 (USSR)

ABSTRACT: Tolmachev, a repair shop foreman of a metal works in Zlatoust, asks for information about a handbook of winding data for electric motors, and for information on braiding machines. He says that the new series of electric motors is harder to repair than the old series and asks why another series of motors cannot have windings that are more convenient to repair. Brief answers to these questions are given.

Card 1/1

RAMBIDI, N.G.; TOLMACHEV, S.M.

Electron diffraction study of the structure of Ga_2O and In_2O) molecules. Teplofiz. vys. temp. 3 no.3:487-489 My-Je '65.
(MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

TOLMACHEV, V., master sporta

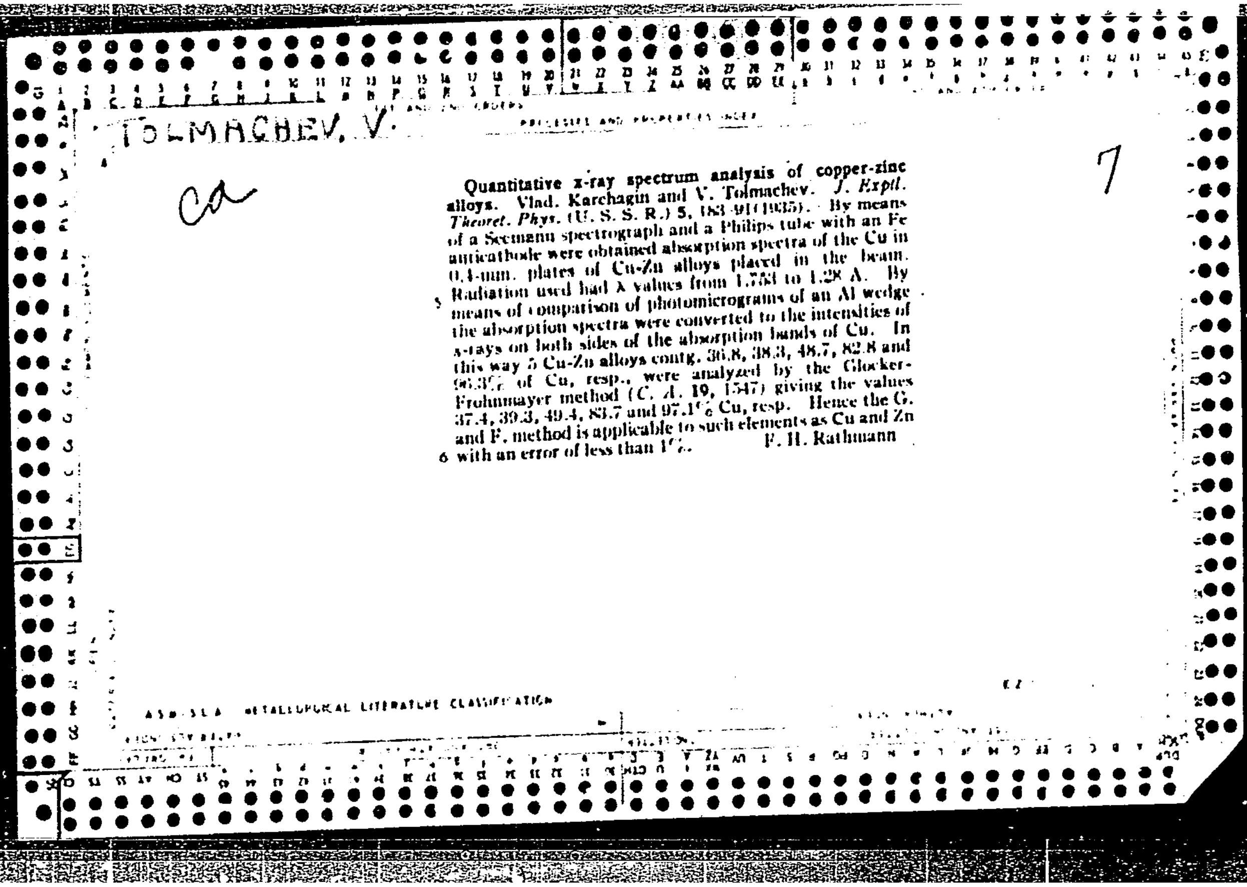
Our experience. Kryl. rod. 14 no.8:46 Ag '63. (MIRA 16:8)

1. Predsedatel' Kuybyshevskoy oblastnoy aviamodel'noy sektsii Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.
(Kuybyshev--Airplanes--Models)

SOLOV'YEV, M., inzh.; TOLMACHEV, V., inzh.

Machine for turning tires. Mast.ugl. 9 no.2:9 F '60.
(MIRA 13:7)

(Tires, Steel--Maintenance and repair)
(Mine railroads--Equipment and supplies)



TOLMACHEV, V.

Ca

7

PROCESSES AND PROPERTIES INDEX

Quantitative x-ray spectrum analysis of copper-zinc alloys. Vlad. Karchagin and V. Tolmachev. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 5, 183-91(1935).—By means of a Seemann spectrograph and a Philips tube with an Fe anticathode were obtained absorption spectra of the Cu in 0.4-mm. plates of Cu-Zn alloys placed in the beam. Radiation used had λ values from 1.783 to 1.28 A. By means of comparison of photomicrograms of an Al wedge the absorption spectra were converted to the intensities of x-rays on both sides of the absorption bands of Cu. In this way 5 Cu-Zn alloys contg. 36.8, 38.3, 48.7, 82.8 and 96.3% of Cu, resp., were analyzed by the Glocker-Frohnmayer method (*C. A.* 19, 1547) giving the values 37.4, 39.3, 49.4, 83.7 and 97.1% Cu, resp. Hence the G. and F. method is applicable to such elements as Cu and Zn with an error of less than 1%. F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 04456-67 EWT(d)/EWT(m)/T-2/EWP(h)

ACC NR: AP6028566 SOURCE CODE: UR/0209/66/000/008/0018/0025

AUTHOR: Antonov, O. (General designer); Tolmachev, V. (Engineer)

52
51
B

ORG: none

TITLE: Transport aircraft today and tomorrow

SOURCE: Aviatsiya i kosmonavtika, no. 8, 1966, 18-25

TOPIC TAGS: transport aircraft, aircraft performance, turboprop aircraft/AN-22 transport aircraft

ABSTRACT: Although subsonic aircraft are considered to be the most economical aircraft for transporting cargo, it is possible that sooner or later supersonic cargo transports will appear. The main prerequisites for success in the development of such an aircraft are the reduction of the weight and specific fuel consumption of jet engines and the search for new aerodynamic configurations for transport aircraft. At present, however, even the development of transonic transport aircraft with large cargo compartments, high takeoff and landing characteristics, and independence from ground-support equipment is a problem. It is more important to decrease the loading and unloading time of transport aircraft than to increase their cruising speed. The load ratio (cargo-over-takeoff-weight ratio), specific fuel consumption, range, and takeoff and landing runs are the principal economic factors of transport aircraft.

Card 1/3

L 04456-67

ACC NR: AP6028566

An increase in aircraft speed results in a decrease in the lift-over-drag ratio and an increase in the specific fuel consumption per kilogram of thrust and of aircraft weight. The flying speed, however, should not be lower than the optimal speed for the power plant selected for the aircraft. The turboprop power plant should be used within a speed range not exceeding Mach 0.7. The speed range for by-pass turbojet power plants is from M = 0.65 to M = 1.1, and for jet-engine power plants the speed range reaches a Mach number higher than 0.9.

From the article it follows that future transport aircraft heavier than the AN-22 will be equipped with turboprop engines. After stating that the AN-22 lifts up to 80 tons of cargo and has a maximum range of 11,000 km, the authors indicate that there are no basic limitations to the development of transport aircraft, equipped with new turboprop engines designed by aircraft Designer-in-Chief N. D. Kuznetsov, with greater payload and range than the AN-22 aircraft. There are other techniques for increasing payload and range which do not require an increase in the payload-to-takeoff-weight ratio and an improvement in engine efficiency. Since range is related directly to the lift-over-drag ratio of an aircraft, designers are paying great attention to the idea of boundary-layer control by suction in order to decrease total drag by 20 to 30 percent. There already exist experimental aircraft with boundary-layer bleeding systems. Aircraft takeoff and landing performance can be improved by the use of a boundary-layer blowing system

Card 2/3

L 04456-67

ACC NR: AP6028566

with a jet flap. However, since there are a great number of design complexities involved in the development of a jet flap, "there may be only a single experimental aircraft in the world with this system."

The possibility of automating all phases of flight, from takeoff to landing, is discussed. In spite of the use of semiconductors and miniaturization, the weight and volume of aircraft electronic equipment have continued to increase from year to year. The total weight of all aircraft systems and equipment makes up 8 to 12 percent of an aircraft's takeoff weight, and each additional kilogram of equipment weight increases the takeoff weight by 4 to 10 kilograms. Orig. art. has: 8 figures. [ATD PRESS: 5062-F]

SUB CODE: 01 / SUBM DATE: none

Card 3/3 egk

TOLMACHEVA, A.P.; TOLMACHEV, V.A.

Hydrochemical characteristics of the Maloye More. Trudy Baik. limnol.sta. 17:137-191 '59. (MIRA 12:12)
(Maloye More--Water--Composition)

TOLMACHEV, V.A., inzh.

Increasing the handling capacity of classification yards. Zhel.dor. transp. 47 no.10:9-14 O '65. (MIRA 18:10)

TOLMACHEVA, A.P.; TOLMACHEV, V.A.

Hydrochemical characteristics of tributaries feeding the Maloye More. Trudy Baik.limnol.sta. 17:192-204 '59.
(MIRA 12:12)

(Sarma River--Water--Composition)
(Maloye More region--Water--Composition)

TOLMACHEV, V. A.
PHASE I Treasure Island Bibliographic Report

Call No.: AF546574

BOOK
Authors: Ch. I - LEVINGTON, A. L. and PROVOZOV, F. F.
Ch. II - GOLOSTENOV, G. A., Bch. of Eng. Sci., and DEABISHER, T. V. Eng.
Ch. III - FELL', V. G., Bch. of Eng. Sci., and RABINOVICH, Kh. A. Eng.
Ch. IV & V - DRUKKER, S. A., Bch. of Eng. Sci.
Ch. VI - FELL', V. G., Bch. of Eng. Sci.
Ch. VII - OSKOLKOV, I. N., Bch. of Eng. Sci., and SOKOLOV, S. A. Eng.
Ch. VIII - RADCHIK, B. I., Eng.
Ch. IX - GORDIYCHUK, I. B.
Ch. X - TOLMACHEV, V. A., Eng.
Full Title: TECHNIQUE OF CINEMATOGRAPHY
Series: Accomplishments of Soviet Cinema Technique
Transliterated Title: Kinos'emochnaya tekhnika
Seriya: Dostizheniya sovetskoy kinotekhniki

Publishing Data
Originating Agency: None
Publishing House: State Publishing House of Cinematographic Literature (Goskinoizdat)
Date: 1952
No. pp.: 462
No. copies: 10,000
Editorial Staff
Editor: None
Ed.-in-Chief: Goldovskiy, E. M., Dr. of Technical Sciences
Tech. Ed.: None
Appraiser: None

Card 2/2

Full Title: TECHNIQUE OF CINEMATOGRAPHY Call No.: AF546504
Series: Accomplishments of Soviet Cinema Technique

Text Data

Coverage: The book is the fourth in the series "Accomplishments of Soviet Cinema Technique" and describes the basic methods of taking colored motion pictures. The technique for black-white photography was given in the three previous books. A description of the combined and special types of production now adopted in Soviet cinema studios and the technique of cinema stage settings will be published in one of the following issues of the series.

The book primarily describes the lighting equipment, lenses and deflectors, electric power units for light effects, and arrangements for color-photographic balances of different intensities. The book also gives brief data on: apparatus for normal and synchronic methods of taking pictures; narrow and broad films; tripods of various types; controlling method and mechanisms in cinematographic apparatuses.

Purpose: General information for wide circle of specialists in motion pictures.

Facilities: Scientific Research Institute for Motion Pictures and Photography (N.I.K.F.I.); cinema-studios in Moscow and Leningrad regions.

No. Russian References: None

Available: A.I.D., Library of Congress

[redacted] 20-2-43/67

AUTHOR TOLMACHEV V.A.

TITLE ~~On the Seasonal~~ Fluctuations of Dissolved Oxigen at Great Depths of Lake Baikal
(O sizonnykh kolbaniyakh rastvorennogo kisloroda na bol'shikh glubinakh Baykala -Russian)

PERIODICAL Doklady Akademii Nauk SSSR,1957,Vol 113,Nr 2,pp 395-398(U.S.S.R.)
Received 6/1957 Reviewed 7/1957

ABSTRACT The rich oxigen content at great depths of Lake Baikal has been known for a long time. But particulars on its seasonal fluctuations are lacking.Because of the immense depths of this lake deviations from the norm (maximum in autumn and spring, deficiencies in winter and summer) are expected in this relation. Since 1948 the hydrochemical situation of Lake Baikal has been systematically investigated by the Baikal-Limnological Station (then part of the lake-scientific laboratory of the Academy of Science of the U.S.S.R.). Already Vereshchagin here distinguishes a "subzone of depth stagnation", which, however, does not stagnate absolutely and which is by no means separated from the upper layer. Ill. 1 demonstrates the presence of regular fluctuations of the O_2-content which are different from year to year. The penetration of O_2 into the depths of Lake Baikal is possible in the following way: 1) by diffusion from higher water layers, 2) by being dragged in mechanically with solid sinking particles (cover,pores) and 3) water relatively rich of dissolved O_2 from smaller depths.

Card 1/3

On the Seasonal Fluctuations of Dissolved Oxygen at Great Depths of Lake Baikal.

[illegible]
20-2-43/67

The importance of convex streams in connection with temperature fluctuations in the upper layers and by influx can only be subordinate. It was ascertained that (schedule 1) within the course of a few months more than 10% (that is more than 1 mg/l) of the dissolved O_2 present in great depths are consumed. Its replenishment takes place within 1-2 months. The diffusion would be too weak to accomplish this, the same as the total content of sinking solid particles, although these two ways are sure to play a certain part. Thus the author comes to the conclusion that the main source of dissolved O_2 in the depths of Lake Baikal must be the mixture with water from smaller depths. This takes place in late autumn in connection with the winds which are high and frequent at that time. The upper hundreds of meters are cooled down at this time and more or less homeothermic. This period for the central Baikal is the only one in which inthe depths (that is under 300 m) the reproduction of the consumed O_2 takes place. In the south Baikal there is in addition a second similar period in June. June is the first ice-free month. The upper water layers slwoly warm up. The O_2- consumption in the depth takes place under unchanged conditions of temperature and lack of light. It is made use of for the breathing of living organisms and for oxidation processes. Only the decay of organic substances could have

Card 2/3

On the Seasonal Fluctuations of Dissolved Oxygen at Great Depths of Lake Baikal.

[redacted]
20-2-43/67

a season-conditioned character (necrosed plankton, mostly vegetable residua from the land). Here neither the sinking velocity nor the time of decomposition are known. Doubtless the surplus consumption of O_2 is intensified at times, which becomes manifest in the amplitude of the seasonal fluctuations of its concentration. (2 illustrations, 1 schedule, 4 citations from Slavic publications).

ASSOCIATION	Laboratory for Lake-Science of the Academy of Science of the USSR
PRESENTED BY	NALIVKIN D.V., Member of the Academy
SUBMITTED	2.3.1956
AVAILABLE	Library of Congress

Card 3/3

PA - 3166

AUTHOR TOLMACHEV, V.A.

TITLE Certain Hydrochemical Indices of Internal Water Exchange in Lake Baikal.
(Nekotoryye gidrokhimicheskiye pokazateli vnutrennego vodoobmena v Baykale -Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 3, pp 639-64 2 (U.S.S.R.)
Received 6/1957 Reviewed 7/1957

ABSTRACT The distribution of dissolved substances according to the vertical is characterized by some special features in the greatest depths of the waters of Lake Baikal. In the two deepest depressions of the lake there are three zones of depth which are distinguished from one another by the concentration ofthe dissolved substances, which are connected with the perculiar features of the dynamics of water. In the upper zone, which is 300 m deep, a great variety of concentration is found. Below it is the zone of the concentrations of the same substances which are relatively stable with respect to time. This zone is then followed at a depth of more than 1000 m by a zone with a greater variablity of concentration. This last layer is some hundreds of meter thick. According to the author's opinion this variability is caused by the fact that the deepest waters of Lake Baikal participate in the inner water exchange system ofthe lake. In what way these waters are envolved in this water exchange system is as yet not known. Movements seem to be all the more active the nearer they are to the under-

Card 1/2

Certain Hydrochemical Indices of Internal Water PA - 3166
Exchange in Lake Baikal.

water bank. The influence exercised by this water displacement will decrease the farther from the bank and the nearer to the middle of the lake it takes place. The configuration of the bottom of the lake is of essential importance in this connection. The dynamic activity of the upper and ofthe lower zone is of a totally different order. The middle zone nowhere adjoints the bank; it is in the depressions of the middle and southern part of Lake Baikal, where it forms a particular inner zone. (With 2 illustrations and 4 Slavic references).

ASSOCIATION	Laboratory for Oceanology of the Academy of Science of the USSR
PRESENTED BY	NALIVKIN A.D., Member ofthe Academy
SUBMITTED	3.3.1956
AVAILABLE	Library of Congress
Card 2/2	

TOLKACHEV, V.A.; CHKHEIDZE, I.I.; BUBEN, N.Ya.

Electron paramagnetic resonance spectrum of benzyl radicals. (MIRA 15:12)
Dokl. AN SSSR 147 no.3:643-644 N '62.

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N. Kondrat'yevym.
(Toluene) (Radicals (Chemistry)—Spectra)

S/051/63/014/003/014/019
E039/E120

AUTHORS: Tolkachev, V.A., and Borisevich, N.A.

TITLE: On the potential barrier of radiationless transitions of molecules in the vapor phase

PERIODICAL: Optika i spektroskopiya, v.14, no.3, 1963, 430-433

TEXT: By using the results of their earlier work, the authors make a stricter approach to the question of finding the potential barrier for radiationless transitions. An expression for the quantum yield γ from the fluorescence of molecules of a rarefied vapor is obtained:

$$\gamma = \frac{\bar{E}_d^* - \bar{E}_1^*}{\bar{E}_d^* - \bar{E}_f^*} \qquad (11)$$

where: $\bar{E}_1^*$, $\bar{E}_d^*$ and $\bar{E}_f^*$ are operators and functions of the energy level E; Einstein's coefficient $B(E, \nu)$ and $g(E)$ the statistical weight. When $\nu = \nu_{el}$,

Card 1/3

On the potential barrier of ... S/051/63/014/003/014/019
E039/E120

$$E_{\alpha}^{*} = \bar{E}_{d}^{*} - \bar{E}_{f}^{*} \qquad (14)$$

ν_{el} is the frequency of electron transitions. Values of E_{α}^{*}, $\bar{E}_{d}^{*} - \bar{E}_{f}^{*}$ and $\bar{E}_{d}^{*} - \bar{E}_{1}^{*}$ are calculated for a number of different wavelengths of exciting radiation λ_b for the following materials: 3,6 - tetramethyldiaminophthalimide; 3 - dimethylamino - 6 - aminophthalimide; 3 - aminophthalimide; 3,6 - diaminophthalimide; 1 - aminoanthraquinone; β - naphthylamine. If the temperature change is not greater than 160° the difference $\bar{E}_{d}^{*} - \bar{E}_{f}^{*}$ is only weakly dependent on temperature. For all the materials except 3,6 - diaminophthalimide the difference $\bar{E}_{d}^{*} - \bar{E}_{f}^{*}$ increases noticeably with increase in λ_b. The value of $\bar{E}_{d}^{*} - \bar{E}_{1}^{*}$ is small. This means that for the given vibrational temperature T_{vib}^{*} the average energy of excitation of the molecule is actually near to the average energy of a molecule undergoing radiationless transitions. $\bar{E}_{d}^{*} - \bar{E}_{f}^{*}$ and E_{α}^{*} at comparatively high T_{vib}^{*} do

Card 2/3

not correspond strictly to a potential barrier, but are of the same order as the vibrational quanta. Investigating the temperature dependence of the fluorescent yield of solutions of anthracene derivatives and other compounds, two types of radiationless transitions were isolated: depending on temperature (connected with the traversal of the hypersurface of the singlet state), and not depending on temperature (connected with transitions in the triplet state). Calculation of the activation energy of radiationless transitions of the first type also gives values of the order of the vibrational quanta.
There is 1 table.

SUBMITTED: August 15, 1962

BRYANTSEVA, V.P., ved. red.; TOLMACHEV, V.B., red.

[Compression of wood in the national economy] Pressovanie drevesiny v narodnom khoziaistve; sbornik materialov. Moskva, 1964. 216 p. (MIRA 18:3)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut nauchnoy i tekhnicheskoy informatsii.

KHUKHRYANSKIY, Pavel Nikolayevich, doktor tekhn. nauk, prof.;
VLADIMIROV, V.M., inzh., vedushchiy red.; TOLMACHEV, V.B., inzh., red.; LADONINA, L.V., tekhn. red.

[Using compressed wood in the manufacture of machine parts] Opyt primeneniia pressovannoi drevesiny dlia izgotovleniia detalei mashin. Moskva, Gos.nauchno-issl. in-t nauchn. i tekhn. informatsii, 1962. 94 p. (MIRA [illegible])
(Wood, Compressed) (Machinery--Design and construction)

TOLMACHEV, V.B.

Rapid production of artistic motion pictures. Trudy NIKFI no.7: 173-183 '47. (MIRA 11:6)

1. Laboratoriya kinotekhnologii Nauchno-issledovatel'skogo kino-foto-instituta, Moskva.
(Cinematography) (Motion pictures--Production and direction)

KHUDOBIN, L.V., kand. tekhn. nauk; POPOV, A.T., ved. red.; TOLMACHEV, V.B., inzh., red.; SHVETSOV, G.V., tekhn. red.

[Abrasive finishing of metals; abstracts]Abrazivnaia obrabotka metallov; referativnyi sbornik. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 43 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 10. No.M-58-394/51) (MIRA 16:2)

(Grinding and polishing--Abstracts)

TOLMACHEV, V.B.

Factors affecting the sharpness and detail of the depth image in various methods of making television films. Tekh.kino i telev. 4 no.9:21-30 S '60. (MIRA 13:9)

1. Gosudarstvennyy proyektnyy institut Giprokinopoligraf.
(Television broadcasting of films)

ISAYEV, Aleksey Il'ich, doktor tekhn. nauk; MOROZOV, Nikolay Aleksandrovich, inzh.; MEDVEDEVA, Ye.T., kand. tekhn. nauk, ved. red.; TOLMACHEV, V.B., inzh., red.; PONOMAREV, V.A., tekhn. red.

[Effect of methods and conditions of metal finishing on the operational properties of gas-turbine blade alloys]Vliianie metoda i rezhima chistovoi obrabotki na ekspluatatsionnye kachestva gazoturbinnykh lopatochnykh splavov. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 20 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 10. No.M-58-127/21) (MIRA 16:3)
(Heat-resistant alloys—Testing)
(Metals—Finishing) (Gas turbines—Blades)

BER, I.Ya., inzh.; SHELKOV, N.I., inzh., ved. red.; TOLMACHEV, V.B., inzh., red.; SOROKINA, T.M., tekhn. red.

[Work on turning, turret and automatic metal-cutting machines; abstracts]Tokarnye, revol'vernye i avtomatnye raboty; referativnyi sbornik. Moskva, Filial Vses.in-ta nauchn. i tekhn. informatsii, 1958. 26 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 10. No.M-58-364/49) (MIRA 16:3)
(Metal cutting--Abstracts)

TOLMACHEV, Vsevolod Borisovich; FOMIN, A.A., red.

[Technology of the taking of television films] Tekhnologiia s"emki televizionnykh fil'mov. Moskva, Iskusstvo, 1965. 165 p. (MIRA 18:12)

TOLMACHEV, V.D., inzh.

Centering of diaphragms and replacement of diaphragm glands in a gas turbine, taking the deflection of the cylinder bottom into account. Energomashinostroenie 7 no.12:41 D '61. (MIRA 14:12)
(Gas turbines)